1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/673,302B

DATE: 02/03/2003
TIME: 10:58:20

Input Set : A:\sequene listing 1.25.txt
Output Set: N:\CRF4\02032003\I673302B.raw

```
  3 <110> APPLICANT: Millennium Pharmaceuticals, Inc.
  4        Law, Deborah Ann
  5        Phillips, David R.
  7 <120> TITLE OF INVENTION: Transgenic Mice Expressing Mutant GP IIIa (beta-3) Protein
  9 <130> FILE REFERENCE: MPI98-148P1USM
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/673,302B
C--> 12 <141> CURRENT FILING DATE: 2001-03-23
 14 <150> PRIOR APPLICATION NUMBER: US 60/115,516
 15 <151> PRIOR FILING DATE: 1998-04-15
 17 <150> PRIOR APPLICATION NUMBER: PCT/US99/08285
 18 <151> PRIOR FILING DATE: 1999-04-15
 20 <160> NUMBER OF SEQ ID NOS: 7
 22 <170> SOFTWARE: PatentIn Ver. 2.1
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 66
 26 <212> TYPE: PRT
 27 <213> ORGANISM: Mus musculus
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Segment of GP IIIa beta-3 subunit
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
 35 <400> SEQUENCE: 1
 36 Lys Leu Leu Leu Thr Thr His Asp Arg Lys Glu Phe Ala Lys Phe Glu
 37   1               5                  10                  15
 39 Glu Glu Arg Ala Arg Ala Lys Trp Asp Thr Ala Asn Asn Pro Leu Tyr
 40               20                  25                  30
W--> 42 Lys Glu Ala Thr Ser Thr Phe Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 43               35                  40                  45
W--> 45 Asn Ile Thr Tyr Arg Gly Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 46           50                  55                  60
W--> 48 Xaa Xaa
 49   65
 52 <210> SEQ ID NO: 2
 53 <211> LENGTH: 66
 54 <212> TYPE: PRT
 55 <213> ORGANISM: Mus musculus
 57 <220> FEATURE:
 58 <223> OTHER INFORMATION: Segment of GP IIIa beta-6 subunit
 60 <220> FEATURE:
 61 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
 63 <400> SEQUENCE: 2
 64 Lys Leu Leu Val Ser Phe His Asp Arg Lys Glu Val Ala Lys Phe Glu
 65   1               5                  10                  15
```

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/673,302B

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```
    67 Ala Glu Arg Ser Lys Ala Lys Trp Gln Thr Gly Thr Asn Pro Leu Tyr
    68             20                  25                  30
W--> 70 Arg Gly Ser Thr Ser Thr Phe Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    71             35                  40                  45
    73 Asn Val Thr Tyr Lys His Arg Glu Lys Gln Lys Val Asp Leu Ser Thr
    74             50                  55                  60
    76 Asp Cys
    77     65
    80 <210> SEQ ID NO: 3
    81 <211> LENGTH: 66
    82 <212> TYPE: PRT
    83 <213> ORGANISM: Mus musculus
    85 <220> FEATURE:
    86 <223> OTHER INFORMATION: Segment of GP IIIa beta-1 subunit
    88 <220> FEATURE:
    89 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
    91 <400> SEQUENCE: 3
    92 Lys Leu Leu Met Leu Ile His Asp Arg Arg Glu Glu Ala Lys Glu Glu
    93   1             5                  10                  15
    95 Lys Glu Lys Met Asn Ala Lys Trp Asp Thr Gly Glu Asn Pro Ile Tyr
    96             20                  25                  30
W--> 98 Lys Ser Ala Val Thr Thr Val Val Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    99             35                  40                  45
W--> 101 Asn Pro Lys Tyr Glu Gly Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    102             50                  55                  60
W--> 104 Xaa Xaa
    105    65
    108 <210> SEQ ID NO: 4
    109 <211> LENGTH: 66
    110 <212> TYPE: PRT
    111 <213> ORGANISM: Mus musculus
    113 <220> FEATURE:
    114 <223> OTHER INFORMATION: Segment of GP IIIa beta-5 subunit
    116 <220> FEATURE:
    117 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
    119 <400> SEQUENCE: 4
    120 Lys Leu Leu Val Thr Ile His Asp Arg Arg Glu Phe Ala Lys Phe Gln
    121   1             5                  10                  15
    123 Ser Glu Arg Ser Arg Ala Arg Tyr Glu Met Ala Ser Asn Pro Leu Tyr
    124             20                  25                  30
    126 Arg Lys Pro Ile Ser Thr His Thr Val Asp Phe Thr Phe Asn Lys Phe
    127             35                  40                  45
W--> 129 Asn Lys Ser Tyr Asn Gly Thr Val Asp Xaa Xaa Xaa Xaa Xaa Xaa Xaa
    130      50                  55                  60
W--> 132 Xaa Xaa
    133    65
    136 <210> SEQ ID NO: 5
    137 <211> LENGTH: 66
    138 <212> TYPE: PRT
```

RAW SEQUENCE LISTING   DATE: 02/03/2003
PATENT APPLICATION: **US/09/673,302B**   TIME: 10:58:20

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

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 139 <213> ORGANISM: Mus musculus
 141 <220> FEATURE:
 142 <223> OTHER INFORMATION: Segment of GP IIIa beta-2 subunit
 144 <220> FEATURE:
 145 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
 147 <400> SEQUENCE: 5
 148 Lys Ala Leu Thr His Leu Ser Asp Leu Arg Glu Tyr Arg Arg Phe Glu
 149   1             5                  10                  15
```
W--> 151 Lys Glu Lys Leu Lys Ser Gln Trp Asn Asn Asp Xaa Asn Pro Leu Phe
```
 152               20                  25                  30
```
W--> 154 Lys Ser Ala Thr Thr Thr Val Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
```
 155               35                  40                  45
```
W--> 157 Asn Pro Lys Phe Ala Glu Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
```
 158               50                  55                  60
```
W--> 160 Xaa Xaa
```
 161   65
 164 <210> SEQ ID NO: 6
 165 <211> LENGTH: 66
 166 <212> TYPE: PRT
 167 <213> ORGANISM: Mus musculus
 169 <220> FEATURE:
·170 <223> OTHER INFORMATION: Segment of GP IIIa beta-7 subunit
 172 <220> FEATURE:
 173 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
 175 <400> SEQUENCE: 6
 176 Arg Leu Ser Val Glu Ile Tyr Asp Arg Arg Glu Tyr Ser Arg Phe Glu
 177   1             5                  10                  15
 179 Lys Glu Gln Gln Gln Leu Asn Trp Lys Gln Asp Ser Asn Pro Leu Tyr
 180               20                  25                  30
```
W--> 182 Lys Ser Ala Ile Thr Thr Thr Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
```
 183               35                  40                  45
```
W--> 185 Asn Pro Arg Phe Gln Glu Ala Asp Ser Pro Thr Leu Xaa Xaa Xaa Xaa
```
 186               50                  55                  60
```
W--> 188 Xaa Xaa
```
 189   65
 192 <210> SEQ ID NO: 7
 193 <211> LENGTH: 65
 194 <212> TYPE: PRT
 195 <213> ORGANISM: Artificial Sequence
 197 <220> FEATURE:
 198 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus
 199       sequence for GP IIIa beta subunits
 201 <220> FEATURE:
 202 <221> NAME/KEY: VARIANT
 203 <222> LOCATION: (5)..(51)
 204 <223> OTHER INFORMATION: Xaa can be any amino acid and may be present or missing
 206 <400> SEQUENCE: 7
```
W--> 207 Lys Leu Leu Val Xaa Ile His Asp Arg Arg Glu Phe Ala Lys Phe Glu
```
 208   1             5                  10                  15
```

(handwritten annotations:) (see p. 4) (65) Xaa's are shown after location 51

```
W--> 210 Xaa Glu Xaa Xaa Xaa Ala Xaa Trp Xaa Xaa Xaa Xaa Asn Pro Leu Tyr
     211             20              25              30
W--> 213 Lys Xaa Ala Xaa Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
     214         35              40                      45
W--> 216 Asn Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
     217         50              55                      60
W--> 219 Xaa
     220 65
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 02/03/2003
PATENT APPLICATION: US/09/673,302B   TIME: 10:58:22

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:2; Xaa Pos. 41,42,43,44,45,46,47,48
Seq#:3; Xaa Pos. 41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:4; Xaa Pos. 58,59,60,61,62,63,64,65,66
Seq#:5; Xaa Pos. 28,41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65
Seq#:5; Xaa Pos. 66
Seq#:6; Xaa Pos. 41,42,43,44,45,46,47,48,61,62,63,64,65,66
Seq#:7; Xaa Pos. 5,17,19,20,21,23,25,26,27,28,34,36,37,39,40,41,42,43,44,45
Seq#:7; Xaa Pos. 46,47,48,50,51,53,54,55,56,57,58,59,60,61,62,63,64,65

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: **US/09/673,302B**

DATE: 02/03/2003
TIME: 10:58:22

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

<u>Use of n's or Xaa's(NEW RULES):</u>
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which
residue n or Xaa represents.

```
Seq#:1; Xaa Pos.  41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:2; Xaa Pos.  41,42,43,44,45,46,47,48
Seq#:3; Xaa Pos.  41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65,66
Seq#:4; Xaa Pos.  58,59,60,61,62,63,64,65,66
Seq#:5; Xaa Pos.  28,41,42,43,44,45,46,47,48,56,57,58,59,60,61,62,63,64,65
Seq#:5; Xaa Pos.  66
Seq#:6; Xaa Pos.  41,42,43,44,45,46,47,48,61,62,63,64,65,66
Seq#:7; Xaa Pos.  5,17,19,20,21,23,25,26,27,28,34,36,37,39,40,41,42,43,44,45
Seq#:7; Xaa Pos.  46,47,48,50,51,53,54,55,56,57,58,59,60,61,62,63,64,65
```
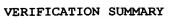
VERIFICATION SUMMARY   DATE: 02/03/2003
PATENT APPLICATION: **US/09/673,302B**   TIME: 10:58:22

Input Set : **A:\sequene listing 1.25.txt**
Output Set: **N:\CRF4\02032003\I673302B.raw**

```
L:11  M:270 C: Current Application Number differs, Replaced Application Number
L:12  M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:42  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:1
L:42  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:1
L:42  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:32
L:45  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:48
L:48  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:64
L:70  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:2
L:70  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:2
L:70  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:32
L:98  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:3
L:98  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:3
L:98  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:32
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:48
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:64
L:129 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4
L:129 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:48
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:64
L:151 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:5
L:151 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:5
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:48
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:64
L:182 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:6
L:182 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:6
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:32
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:48
L:188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:64
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:16
L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:32
L:216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:48
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:64
```